# PS-1A AC Adapter

# OPERATING INSTRUCTIONS



Superior engineering for the art and science of sound.



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## SYMBOLS USED

These symbols indicate important safety or operating features in this booklet and on the chassis.









Dangerous voltages: risk of electric shock	Important operating instructions	Frame or chassis	Protective earth ground
Pour indiquer les risques résultant de tensions dangereuses	Pour indequer important instructions	Masse, châssis	Terre de protection
Zu die gefahren von gefährliche spanning zeigen	Zu wichtige betriebs- anweisung und unter- haltsanweisung zeigen	Rahmen oder chassis	Die schutzerde
Para indicar azares provengo de peligroso voltajes	Para indicar importante funcionar y mantenimiento instrucciones	Armadura o chassis	Tierra proteccionista

# DECLARATION OF CONFORMITY ACCORDING TO ISO/IEC GUIDE AND EN 45014

The Manufacturer: Environmental Specifications for Meyer S

Meyer Sound Laboratories, Inc. 2832 San Pablo Avenue

Berkeley, California 94702-2204, USA

Declares that the product:

PS-1A

Conforms to the following Product Specifications Safety: EN60065: 1994

Safety: EN60065: 1994 EMC: EN55103-1 emmission<sup>1</sup>

EN55103-2 immunity<sup>2</sup>

This device complies with the requirements of the Low Voltage Directive 73 / 23 / EEC and the EMC Directive 89 / 336 / EEC. This device also complies with EN 55103-1 &-2. Operation is subject to the following two conditions:

- 1. this device may not cause harmful interference, and
- 2. this device must accept any interference received, including interference that may cause undesired operation.

Environmental Specifications for Meyer Sound Electronics Products:

Operating Temperature  $0^{\circ}\text{C}$  to  $+45^{\circ}\text{C}$ Nonoperating Temperature  $<-40^{\circ}\text{C}$  or  $>+75^{\circ}\text{C}$ 

Humidity to 95% at 35°C

Operating Altitude to 4600 m (15,000 ft)
Nonoperating Altitude to 6300 m (25,000 ft)

Shock 30g 11 msec half-sine on each

of 6 sides

Vibration 10Hz to 55Hz (0.010m

peak-to-peak excursion)

UL and CSA compliance is pending. Call Meyer Sound for current status.



Made by Meyer Sound Laboratories Berkeley, California USA European Offlice: Meyer Sound Lab. GmbH Carl Zeiss Strasse 13 56751 Polch, Germany

Office of Quality Manager Berkeley, California USA Oct 6, 1999

## PS-1A SPECIFICATIONS

AC INPUT Connector IEC 320 (line, neutral/line, earth)
Operating Voltage 100-240 VAC auto-selecting; 50-60Hz

Max. Power Consumption 400VA

**DC OUTPUT** Connectors Two keyed, pluggable terminal bocks with +48 VDC and GND pins

Voltage 48 VDC ± 0.5V

Current 2A continuous; 6.5A peak

PHYSICAL Dimensions Height: 10", Width: 5", Depth: 3"

Weight 5 lbs (2.7kg); shipping: 8 lbs (3.7 kg)

Enclosure/Finish Black 16-gauge aluminum chassis



### ENGLISH

- To reduce the risk of electric shock, disconnect the device from the AC mains before installing audio cable. Reconnect the power cord only after making all signal connections.
- Connect the device to a two-pole, three wire grounding mains receptacle. The receptacle must be connected to a fuse or circuit breaker. Connection to any other type of receptacle poses a shock hazard and may violate local electrical codes.
- Do not install the device in wet or humid locations without using weather protection equipment from Meyer Sound.
- Do not allow water or any foreign object to get inside the device. Do not put objects containing liquid on, or near, the unit.
- To reduce the risk of overheating the device, avoid exposing it to direct sunlight. Do not install the unit near heat-emitting appliances, such as a room heater or stove.
- This device contains potentially hazardous voltages. Do not attempt to disassemble the unit. The unit contains no user-serviceable parts. Repairs should be performed only by factory-trained service personnel.

#### **FRANÇAIS**

- Pour réduire le risque d'électrocution, débrancher la prise principale de devis, avant d'installer le câble d'interface allant à l'audio. Ne rebrancher le bloc d'alimentation qu'après avoir effectué toutes les connections.
- Branchez devis dans une prise de courant à 3 dérivations (deux pôles et la terre). Cette prise doit être munie d'une protection adéquate (fusible ou coupe-circuit). Le branchement dans tout autre genre de prise pourrait entraîner un risque d'électrocution et peut constituer une infraction à la réglementation locale concernant les

# SAFETY SUMMARY



- installations électriques.
- Ne pas installer de devis dans un endroit où il y a de l'eau ou une humidité excessive.
- Ne pas laisser de l'eau ou tout objet pénétrer dans devis. Ne pas placer de r'cipients contenant un liquide sur cet appareil, ni à proximité de celui-ci.
- Pour éviter une surchauffe de devis, conserver-la à l'abri du soleil. Ne pas installer à proximité d'appareils dégageant de la chaleur tels que radiateurs ou appareils de chauffage.
- Ce haut-parleur contient des circuits haute tension présentant un danger.
   Ne jamais essayer de le démonter. Il n'y a aucun composant qui puisse être réparé par l'utilisateur. Toutes les réparations doivent être effectuées par du personnel qualifié et agréé par le constructeur.

#### **D**EUTSCH

- Um die Gefahr eines elektrischen Schlages auf ein Minimum zu reduzieren, der Gerätvom Stromnetz trennen, bevor ggf. ein Audio-Schnittstellensignalkabel angeschlossen wird. Das Netzkabel erst nach Herstellung aller Signalverbindungen wieder einstecken.
- Das Gerätan eine geerdete zweipolige Dreiphasen-Netzsteckdose anschließen. Die Steckdose muß mit einem geeigneten Abzweigschutz (Sicherung oder Leistungsschalter) verbunden sein. Der Anschluß der unterbrechungsfreien Stromversorgung an einen anderen Steckdosentyp kann zu Stromschlägen führen und gegen die örtlichen Vorschriften verstoßen.
- Darauf achten, daß weder Wasser noch Fremdkörper in das Innere der Geräteindringen. Keine Objekte, die Flüssigkeit enthalten, auf oder neben die unterbrechungsfreie Stromversorgung stellen.
- Um ein Überhitzen dem Gerätzu zu verhindern, das Gerät vor direkter

- Sonneneinstrahlung fernhalten und nicht in der Nähe von wärmeabstrahlenden Haushaltsgeräten (z.B. Heizgerät oder Herd) aufstellen.
- Im Inneren dieses Gerätherrschen potentiell gefährliche Spannungen. Nicht versuchen, das Gerät zu öffnen. Es enthält keine vom Benutzer reparierbaren Teile. Reparaturen dürfen nur von ausgebildetem Kundenienstpersonal durchgeführt werden.

#### **E**SPAÑOL

- Para reducir el riesgo de descarga eléctrica, desconecte de la red el instrumento antes de instalar el cable de señalización de interfaz de la segnale. Vuelva a conectar el conductor flexible de alimentación solamente una vez efectuadas todas las interconexiones de señalizatción.
- Conecte el instrumento a un tomacorriente bipolar y trifilar con neutro de puesta a tierra. El tomacorriente debe estar conectado a la protección de derivación apropiada (ya sea un fusible o un disyuntor). La conexión a cualquier otro tipo de tomacorriente puede constituir peligro de descarga eléctrica y violar los códigos eléctricos locales.
- No instale el instrumento en lugares donde haya aqua o humedad excesiva.
- No deje que en el instrumento entre agua ni ningún objeto extraño. No ponga objetos con líquidos encima de la unidad ni cerca de ella.
- Para reducir el riesgo de sobrecalentamiento, no exponga la unidad a los rayos directos del sol ni la instale cerca de artefactos que emiten calor, como estufas o cocinas.
- Este instrumento contiene niveles de voltaje peligrosos en potencia. No intente desarmar la unidad, pues no contiene piezas que puedan ser repardas por el usuario. Las reparaciones deben efectuarse únicamente por parte del personal de mantenimiento capacitado en la fábrica.

# THE PS-1A: INTRODUCTION

Thank you for purchasing the PS-1A; the simplest, most elegant approach to powering up to two HM-1 self-powered loudspeakers, with or without subwoofers. The PS-1A is a 48 VDC external power supply which provides these benefits:

- Low voltage wiring simplifies installation.
- Utilizes telecom 48 V supply and bus standard.
- Eliminates 50/60 Hz AC noise coupling in wiring.

The AC adapter has two output connectors wired in parallel inside the supply, allowing either one output for two speakers at the end of a single cable, or one connector and cable per speaker. In both cases, the full output power is available to only two speakers per PS-1A. Two pre-wired 10 ft. power cables are provided with each PS-1A.

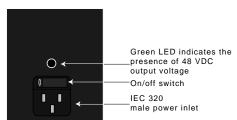
The output connectors are polarized with kevs that prevent misconnection between the PS-1A and the HM-1. For example, the power cables are pre-wired such that the GND and +48 VDC terminals fit in the correct orientation in both the PS-1A and HM-1. If additional cables are required, observe the same cable wiring convention.

For installations of up to 10 HM-1s, using multiple PS-1A AC adapters is often the most cost-effective solution. Since the limited output power for each supply acts as circuit protection for light gauge cables, it is not necessary to install circuit breaker distribution panels. Using the PS-1A does, however, limit each 48 V line to two speakers. The dimensions of the AC adapter are 25.4 cm x 12.7 cm x 7.62 cm.

If an installation includes a large number of speakers, or requires many speakers to operate from a single 48 V line, a single high-output power supply should be considered. Contact Meyer Sound for information on large power supplies.

## AC INLET

The PS-1A uses an international standard IEC 320 Mains AC inlet. This convenient receptacle accepts many power cord types for mains outlets used around the world. The AC voltage operating ranges are 90 - 125 V and 180 - 250 V, at 50 or 60 Hz. The PS-1A automatically selects the proper operating voltage upon applying AC power. The PS-1A must have the correct power cord for the AC power in the area in which it will be used.



PS-1A AC inlet





Don't use a ground-lifting adapter or cut the AC ground pin.



To avoid electrical shock and damage to the unit, use the power cord specified by Meyer Sound or an equivalent that satisfies the requirements of the local safety testing agency. Do not operate the unit if the power cables are frayed or broken.

The LED indicates AC power presence by illuminating with a green color. If the PS-1A is plugged into an AC power source but is not connected to a speaker, the LED blinks on and off in 2 second intervals.

## OUTPUT CONNECTORS

The PS-1A has two output connectors wired in parallel inside the supply, allowing either one output for two speakers at the end of a single cable, or one connector and cable per speaker. In both cases, the full output power is available to only two speakers per PS-1A.



#### PS-1A output connectors

The "-" pin of the 48 VDC input on the HM-1 is connected to the chassis which is connected to earth ground via the AC power cable (labeled "GND" on the PS-1A). The HM-1 amplifier is at earth potential which minimizes noise and allows easy same potential interfacing with audio sources.



# CONTACT INFORMATION

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